5

## ABSTRACT OF THE DISCLOSURE

The present invention relates to an apparatus for measuring the thickness of materials using the focal length of a lensed fiber and a method thereof. More particularly, the invention relates to a method of measuring the thickness of materials using the strength of the beam reflected from the focal length when the beam emitted from a lensed fiber is focused on a material.

According to the present invention, the lensed fiber generates a form of Gaussian Beam and is attached to PZT 12 in order to detect the quantity of beam while the lensed fiber is moved vertically against the material to be measured.

